

A SELECTED BIBLIOGRAPHY ON THE NATURAL HISTORY
OF KING'S PARK

- AUDAS, J. W. 1926. The King's Park, Perth. *Vict. Nat.*, 43: 236-239 [an account of the flora].
- GENTILLI, J. 1953. Amanitas from King's Park. *W. Austr. Nat.*, 4 (2): 25-34; 4 (3): 59-63.
- LIPFERT, O. H. 1937. Notes on the Birds of Crawley, Perth, in the Early Nineties. *Emu*, 37 (2): 133-134.
- MAIN, A. R., and M. A. CARRIGY. 1953. Native Snails of the Genus *Bothriembryon* in King's Park, Perth. *W. Austr. Nat.*, 4 (3): 49-59.
- McINTOSH, D. L. 1957. Western Shrike-Thrush at Nedlands. *W. Austr. Nat.*, 5 (8): 231.
- PELLOE, E. H. 1921. *Wildflowers of Western Australia*, Melbourne [frequent references to King's Park].
- SERVENTY, D. L. 1936. Feeding Methods of *Podargus* with Remarks on the Possible Causes of its Aberrant Habits. *Emu*, 35 (2): 74-90.
- SERVENTY, D. L. 1938. The Relative Abundance of Birds Illustrated with Reference to King's Park, Perth. *Emu*, 37 (4): 269-273.
- SERVENTY, W. R. 1950. Smoker Parrots in King's Park. *W. Austr. Nat.*, 2 (7): 166.
- WILSON, H. M. 1946. The Life History of the Western Magpie. *Emu*, 45 (3): 233-244; 45 (4): 271-286.

RECENT CAPTURE OF THE QUOKKA
(*SETONIX BRACHYURUS*) ON THE MAINLAND

By S. BARKER, A. R. MAIN and R. M. SADLEIR,
Department of Zoology, University of W.A.

In the *West Australian* of April 17, 1957, an article by Dr. E. P. Hodgkin discussed work carried out on the Rottne I. population of the Quokka by the University Zoology Department. The suggestion was made that the Quokka had become extinct on the mainland during the early 1930s.

Later in the month Mr. H. A. C. Atkinson, of Bibra Lake, after reading the article, informed the C.S.I.R.O. Regional Laboratory that he knew of a mainland population of the Quokka. The message was passed on to the Zoology Department. As a result a party consisting of H. Atkinson, A. Main, D. Serventy, J. Ford, R. Sadleir and S. Barker visited a forestry area 5 miles S.E. of Byford on May 4. Mr. Atkinson knew the area intimately as he had lived there for many years. Five swamps were inspected and abundant evidence of Quokka presence was found, such as tracks, droppings and tunnels in the thick undergrowth. In some cases it was possible to measure the foot imprints in the tunnels; these conformed to the known foot length of the Quokka.

A trapping programme was initiated by the authors on May 8 and continued until June 6. The traps were standard design by G. B. Sharman and successfully used for capture of Quokkas on Rottne and Bald Islands. The bait used was apple and bread crust.

The trapping sites were the swampy headwaters of the following streams:—Wongong Brook (area 1); Manjedal Brook

(areas 2 and 3); and Beenyup Brook (area 4). The swamps were shallow basins characterised by their extreme length compared with their width. The major axis extends roughly N.-S. in each case. The most extreme development of this type of swamp occurs on Manjedal Brook where what we termed "long swamp" extended for 2½ miles with a maximum width of approximately 150 yards. The vegetation is dominated by *Agonis linearifolium*, *Gahnia* sp., association which when not regularly burnt is extremely thick and affords good cover for the Quokka.

At first results were discouraging. In 7 nights of continual trapping in areas 1 and 2 the only captures were two introduced rodents, *Rattus rattus*. Then on June 17 our luck changed. In trapping area 2 all traps were set off. The captures were two adult Quokkas, one immature female Bandicoot (*Isodon obesulus*) and one *R. rattus*. Our success followed 9 consecutive nights without a capture; this represented 57 trap nights.* Both Quokkas had removed hair from their heads due to attempts to escape, otherwise they were in fair condition. One was an adult male, the other an adult female without a pouched young. Both animals were parasitised by the tick *Ixodes australiensis* (kindly identified by Mr. D. C. Swan).

Trapping was continued in area 2 for 5 more nights without success. Meanwhile we had commenced trapping in area 3, close to area 2. One adult male Quokka was captured here after 4 consecutive nights' trapping; this represented 18 trap nights. After three more days in which only one *R. rattus* was caught all traps were moved to area 4. Trapping was discontinued in areas 2 and 3 because despite every care the habitat was suffering serious destruction as visits to the traps increased. It was considered that too many tracks through the inhabited swamps would leave the Quokkas exposed to active predators, such as foxes. We continued trapping in area 4 for 16 consecutive nights; the only captures were three *R. rattus*. The table summarises the results of live trappings in the four areas between May 8 and June 6:

AREA	1	2	3	4
Trap nights	28	87	36	212
Number traps sprung	1	15	6	5
Number captures	1A	2A, 2B, 1C	1A 1B	3A

legend A = *R. rattus*. B. = *Setonix brachyurus*. C = *Isodon obesulus*.

DISCUSSION

The importance of finding a colony of the Quokka on the mainland cannot be exaggerated. The records of the Western Australian Museum (kindly made available by Mr. L. Glauert) show that the last mainland specimen was obtained in July, 1935, from Torbay,

* A trap night is defined as the setting of one trap for one night.

Albany. The previous two specimens came from Karridale and Chorkerup, both in 1933. There is no doubt that a great decline in numbers of the Quokka occurred in the 1930s. However, the authors agree with White (1952) that isolated populations of the Quokka still occur on the mainland. This view has been supported by Sharman (1954); by the capture of an immature *Setonix* by Mr. J. Rate at Walpole in December, 1955; by a visual record of Mr. R. Aitkin who saw two dead Quokkas on the Albany Highway near the Travellers Arms on January 11, 1956, and on March 22, 1956.

This evidence indicates that close attention by naturalists to suitable undisturbed swamps in the forest areas would be likely to yield more information on the mainland occurrence. The authors and the Fisheries Department would be glad to learn of the success encountered by naturalists looking in suitable localities. However, it cannot be emphasised too strongly that undirected blundering through swamps in search of Quokkas will do more to hasten their extinction than any other factor.

The authors acknowledge the receipt of University Research Grants during the course of this investigation.

LITERATURE CITED

- SHARMAN, G. B. 1954—The relationships of the Quokka (*Setonix brachyurus*). *W.A. Nat.*, 4: 159-168.
WHITE, S. R. 1952—The occurrence of the Quokka in the South-West. *W.A. Nat.*, 3: 101-103.

FROM FIELD AND STUDY

Grey-tailed Tattler on the Swan River Estuary.—The Grey-tailed Tattler (*Tringa brevipes*) is a relatively common visitor to northern Australia. In the south of this State two of the three known records are from the Swan River Estuary (*Emu*, 31: 278; 47: 266). Last summer four birds were seen on the shores of Melville Water, near Como beach. One was noted on November 26, 1956, and three were seen on December 3.

C. F. H. JENKINS, Department of Agriculture, Perth.

Glossy Ibis at Bibra Lake.—The Glossy Ibis (*Plagadis falcinellus*) occurs rarely in southern Australia and there are only about half a dozen published records for the South-West. It was with considerable interest, therefore, that I noted a single individual at Bibra Lake on November 26, 1956. The ibis was feeding on a grassy flat in company with 20-30 White-faced Herons. Through field glasses the sickle-shaped bill and greenish sheen on the plumage could be clearly seen. In flight the bird appears uniformly black and so cannot be confused with the Straw-necked Ibis, which shows prominent white markings when in the air.

—C. F. H. JENKINS, Department of Agriculture, Perth.

Kestrel at Sea in Northern Australia.—During May, 1957, I made a cruise in north-western and northern waters on H.M.A.S. *Fremantle*, as part of my national service training. On May 14, at